PUGET SOUND ENERGY

OVERLAKE DISTRICT ENERGY FEASIBILITY STUDY

SCOPE OF WORK

April 18, 2014

The City of Redmond, Washington ("City") and Puget Sound Energy, Inc., a Washington Corporation, ("PSE") have agreed to complete a feasibility study of the development of a district energy system in Overlake Village. "Parties" include PSE, City, and associated 3rd parties and contractors. This Scope of Work ("SOW") defines the tasks and deliverables that will be completed to produce a final feasibility study report for the City and PSE of the district energy options at Overlake Village. Upon execution of the Agreement, a steering committee will be formed, consisting of the appropriate members of all parties. The committee's role will be to facilitate communication, collaboration, technical oversight and problem-solving, direction and decision-making, and project delivery.

Overlake Village District Energy Concept – supporting the future vision

The City has been exploring district energy concepts in conjunction with redevelopment of Overlake Village that are consistent with the City's Climate Action Strategy. The City commissioned an initial evaluation of district energy concepts by Puttman Infrastructure and this document described the location, extent, and character of the proposed district energy zone. Generally, the proposal considers centralized heating and cooling facilities for a mixed use 175-acre area that is bounded by SR-520 to the north, 156th Avenue NE to the east, NE 20th Street to the south, and 148th Avenue NE on the west. Puttman describes the basic district energy concepts, modeling input assumptions and methods, and concludes the district energy proposal can potentially reduce energy use by 10% to 30%, energy costs related to heating and cooling may be reduced by 10% to 50%, and carbon emissions may potentially be reduced by 15% to 45%. This concept and associated figures are based on 2030 growth projections for Overlake Village and the urban center vision as described in Redmond's Comprehensive Plan.

The future vision for Overlake is summarized as follows:

Redmond's adopted vision for Overlake in 2030 is a thriving, dense urban neighborhood where 16,000 people live and 70,000 people work. In 2030, thousands of new residents walk from their homes to their jobs or to patronize neighborhood shops and services. Many stroll along a redesigned 152nd Avenue NE, the neighborhood's main street. Others use new streets and urban pathways established as the neighborhood is redeveloped.

The neighborhood contains three major parks, two of which also serve as regional stormwater management facilities and provide an important green contrast to surrounding urban development. Employees relax in the park refuge spaces while visitors take in live music. From the parks, one can see residents of adjacent mid-rise condominiums hosting family and friends on balconies overlooking the neighborhood and beyond.

Each day, light rail quickly and conveniently transports residents, employees, and visitors between two Overlake stations and regional destinations. For those preferring bicycles to trains, regional trails have been improved, reducing congestion at street crossings. Complete streets and new non-motorized crossings of State Route (SR) 520 make transit convenient for more people and provide new connections between Overlake Village and the Employment Area to the

north. The Overlake of 2030 succeeds as a regional hub of activity because the community at large, together with private property owners and developers, established a vision and followed through on a strategy to achieve it.

The feasibility study tasks are defined as follows. Each task represents a milestone, in which work products or deliverables are provided to all parties, with opportunity to review and comment prior to progressing to the next task. The intent is to share information, avoid needing to re-work any tasks due to lack of earlier input, and provide direction that reflects consensus among the parties.

TASK 1: DATA ACQUISITION AND QUALITY ASSURANCE

McKinstry will acquire and review planning and engineering information available from the City. McKinstry may also need to contact known private developers or property owners to determine whether district energy will realistically align with current or future private development plans. McKinstry will coordinate with the City prior to such contact with private parties.

DELIVERABLE
Data inventory and summary of planning/space use assumptions will be developed and the final will be included in the feasibility study report.

TASK 2: ENERGY USE AND ENGINEERING STUDY

PSE will hire energy service company McKinstry to determine thermal loading and energy use, conceptual design, price estimates, and infrastructure needed to build, operate and maintain the district energy system. Key information includes the location, footprint, materials and equipment associated with an energy generation and distribution system. McKinstry will provide:

1. Baseline energy consumption for code minimum development;
2. Descriptions of proposed district energy models and concepts;
3. Rough Order of Magnitude (ROM) incremental cost and energy saving estimates for each proposed model; and
4. Total Cost of Ownership Analysis including cost of ongoing maintenance of proposed systems and any incentives available in the industry.

With the results of McKinstry's analysis, PSE will provide a description of the current and planned electric grid infrastructure and natural gas infrastructure that will likely serve the District. This description will include:

1. An inventory of electric substations and gas distribution stations serving the District;
2. A capacity analysis of PSE's electric and gas infrastructure including where improvements may be required to support the District;
3. A reliability assessment of the electric grid serving the District; and
4. Key engineering considerations around siting electric and gas facilities in and around the District.

DELIVERABLE
A written summary of McKinstry's and PSE's analyses will be developed and the final will be included in the feasibility study report. All parties will collaborate on the development of the scenarios in Task 6 as needed, and appropriately utilize the conclusions of their analyses.

TASK 3: TECHNOLOGY ASSESSMENT

District energy has potential for furthering Redmond's vision for Overlake and the City's Climate Action Strategy. PSE will perform a technology assessment for the District to consider for inclusion into the scenarios. This assessment will consider the suitability and applicability of the following categories of technology:

1. Generation technologies (such as natural gas, geothermal, waste heat capture, solar, or other) for on-site distributed generation including combined heat and power technologies that might support the District Energy plant;
2. Distribution Automation solutions to support enhanced reliability through automation of fault detection, fault isolation and restoration;
3. Demand Response technologies that support shaving load during particular events, to facilitate better peak load management and impact on the grid serving the site;
4. Smart Meter and Advance Meter Infrastructure solutions to provide enhanced energy use information for consumers and load management capabilities;
5. Energy efficiency/conservation technologies and incentive programs for new construction;
6. Electric vehicle integration;
7. Energy storage technologies; and
8. Renewable Energy Credits.

For each of these categories of technologies, PSE will research the types of solutions available, the market readiness and adoption of these technologies, and how they could be used to meet the purpose as stated in the opening paragraph of the Agreement.

DELIVERABLE
A summary of the technology assessment will be developed and the final will be included in the feasibility study report. Conclusions from the technology assessment will be utilized in development of the scenarios in Task 6.

TASK 4: UTILITY INTERCONNECTION AND REGULATORY ANALYSIS AND REVIEW

PSE will evaluate how the District can connect and participate in the utility grid. This evaluation will consider interconnection for district energy developments, distributed generation as well as interconnection for residential and commercial facilities. This evaluation will provide an analysis of the following:

1. PSE's existing rate schedules and tariffs and a discussion of the different options for interconnecting importing and exporting loads under existing tariffs;
2. WUTC rules as they apply to district energy developments; and
3. FERC, State, and WUTC rules governing ancillary services provided by generators and their applicability to generation projects the District might consider.

PSE anticipates that the District may want to consider some interconnection scenarios that may not fit within PSE's current tariffs and/or the WUTC rules for utilities. In collaboration with the City, PSE will also participate in a discussion around changes to tariffs that might be considered to better optimize the interconnection for the District.

DELIVERABLE
A written summary of the interconnection and regulatory analysis will be developed and the final will be provided in the feasibility study report. Any recommendations will be used to guide the scenario development.

TASK 5: OWNERSHIP STRUCTURES AND FINANCING METHODS EVALUATION

Sound Energy Investments will identify and evaluate public, private, or a combination thereof ownership structures. Parties will meet in advance to discuss options for consideration and to ensure coordination. Purpose is to identify future costs and potential revenues for the City and other parties related to capital investment, operations, and maintenance. This evaluation will include the following:

1. Define general segmentation and points of demarcation of District Energy assets – identify how new facilities and infrastructure might be organized based on recommended Public, Private or P3 ownership models;
2. Describe stakeholder responsibilities and potential risks based on ownership models;
3. Describe potential public funding mechanisms and possible private financing methods; and
4. An assessment of possible revenues and costs from new District Energy facility.

DELIVERABLE
A written summary of potential ownership structures and financing methods will be developed and the final will be provided in the feasibility study report. Any recommendations will be used to guide the scenario development.

TASK 6: SCENARIO DEVELOPMENT

For tasks 6-8, the objective is to identify model scenarios, analyze their implications and economic feasibility, and form a preferred recommendation and next steps. For Task 6, PSE will lead the development of model scenarios for evaluation in collaboration with McKinstry, Sound Energy Investments and City. Scenarios will include combinations of technology assemblages and prospective ownership structures, including responsible party demarcation, primary implementation actions, potential risks, and one-time investment vs ongoing operational costs. Scenarios will be consistent with the desired land use, expected rate and location of growth, and timing for planned capital investments, and may include a range of slow vs fast rates of growth. Scenario analysis will also determine whether policies and regulations for the City or other entities are supportive, and recommend potential amendments as needed.

DELIVERABLE
A written summary of all scenarios considered in the Study will be included in the feasibility study report. A presentation to the Steering Committee will include the set of scenarios eligible for further analysis.

TASK 7: SCENARIO ANALYSIS AND DISCUSSION

PSE will evaluate the model scenarios and provide an assessment relative to total cost to develop and operate, energy consumption, carbon emissions and implementation feasibility. The modeling results will be summarized in scorecard form, including initial capitalization and possible funding options based on stakeholder segmentation. The analysis will identify and evaluate potential implementation issues, including risks and possible mitigation strategies, and recommend next steps for development, implementation, and future operation.

DELIVERABLE
The full analysis will be developed and presented to the Steering Committee. The final will be included in the feasibility study report.

TASK 8: FEASIBILITY STUDY REPORT

PSE will lead the development of the Draft and Final Feasibility Study Reports which will recommend the optimal and most realistic path forward, and associated policy and code updates, as well as needed investments, preferred technologies, energy generation and distribution system, and layout. The feasibility study report will be a collaborative effort of all parties involved in the study. Recommendation will be presented as a draft action plan, available for review and comments and, once finalized, issued as a final report.

DELIVERABLE
Draft and Final Feasibility Study Reports will be provided to the City as well as a presentation to the Steering Committee.

TIMELINE

PSE is responsible for coordinating between all parties involved in this Study and will provide monthly status report to the City. Schedule shall be further developed during kick-off meeting, and may be amended over the course of the Study as agreed upon by the City and PSE.

The goal is to complete the project in 2014. If additional time is needed, both parties will agree to a new target. Once the Agreement is executed, parties shall hold a pre kick-off meeting to develop a set of milestone dates, consistent with task development and other constraints either party may have.